## REMARKS

The following remarks are submitted to be fully responsive to the final official action dated October 15, 2010. This response is thus timely submitted within the three-month shortened statutory period for response. Should any fees be required, the Commissioner is authorized to charge Medtronic, Inc. Deposit Account No. 01-2525 and thereafter notify us of the same. Reconsideration of all outstanding grounds of the rejection and allowance of the subject application are believed in order and respectfully requested.

As a preliminary matter, claim 7 has been amended to change its dependency to correspond with a previous incorporation of the limitations of claim 6 into independent claim 1, so that claim 7 now depends directly from claim 1. No new matter has been added.

In the Official Action, claims 1, 3, 7, 8, 10, and 13 are rejected under 35 U.S.C. 
§103(a) as being unpatentable over U.S. Patent No. 5,947,953 (Ash et al.), in view of 
U.S. Patent No. 6,246,914 (de la Rama et al.). This rejection of the pending claims is 
respectfully traversed, at least for the following three reasons: (1) both of the cited 
references, alone or in combination, fail to teach or suggest the aperture shape as is 
recited in the independent claims; (2) both of the cited references, alone or in 
combination, fail to teach or suggest an arrangement of apertures in a plurality of rows as 
is recited in the independent claims; and (3) one would not be motivated to modify the 
holes of the Ash reference with the slits of the de la Rama reference, as such a 
modification would render the catheter of the Ash reference unsatisfactory for its 
intended purpose. These reasons are discussed in further detail below.

With regard to the first of the above enumerated reasons for traversal of the pending rejection, in the Official Action, the Examiner continues to concede that the Ash reference does not disclose the claimed aperture shape of independent claims 1 and 8 in that it does not disclose apertures that include first and second corners defined by arcuate portions that intersect with each other. However, the Examiner continues to maintain the unsupported position that the Ash reference contemplates a plurality of aperture shapes.

even after multiple requests by Applicants throughout prosecution of the subject application for the Examiner to identify any portion of the Ash reference that supports this position. It is Applicants position that the Ash reference provides for a specific arrangement of apertures helically and circumferentially around the distal end of a catheter to prevent sucking of the catheter and to minimize vibratory movement at the distal end of its catheter, and that there is nothing in this reference or in the knowledge of one skilled in the art that would teach or suggest any reason to depart from the aperture shapes that are shown and described in the Ash reference. Indeed, any such departure from the illustrated circular apertures of Ash and their associated placement could undesirably alter the desired and specifically described functionality of these apertures. Applicants therefore respectfully request that the Examiner remove the finality of Official Action and identify and/or articulate which portion of the Ash reference provides any motivation for one to modify the shape of its holes in any manner.

Further, even if one could find any suggestion in the Ash reference to modify the shape of its holes in some way (which Applicants do not believe is present in this reference), replacing such holes that are open for fluid flow in all configurations of its catheter with the slits of the de la Rama reference that are specifically provided to be open in some configurations and closed in other configurations is not a supportable argument. That is, the de la Rama reference provides for a catheter that is relatively rigid to allow it to handle high torque situations, but that includes slits to allow it to flex when it is desired to maneuver the catheter through certain locations. These slits are not provided to allow for fluid communication between the inner and outer portions of the de la Rama catheters. Rather, in order for the de la Rama catheters to be able to handle an associated torque applied in high torque situations, slits are used (rather than holes, for example) so that the outer catheter surface can be behave as if it is solid or free of voids or openings when the catheter is in its unflexed configuration. Thus, one skilled in the art would not modify the holes of the Ash reference through which fluid flows with the slits of the de la Rama reference that are provided to improve the flexibility of an otherwise rigid catheter. For at least this reason, independent claims 1 and 8 and their dependent claims are allowable over the cited references.

With regard to the second of the above enumerated reasons for traversal of the pending rejection, the Official Action summarily states that the de la Rama reference includes apertures that "are arranged into a plurality of rows extending along the longitudinal axis of the lumen", which assertion is not supported by anything disclosed or suggested in the de la Rama reference. Although Applicants disagree with the Examiner's characterization of the slits of de la Rama as being equivalent to the "apertures" claimed in the present claims, even the slits that are disclosed by de la Rama are only shown and described as being either "a continually spiraling slit" or "selected from the group consisting of a perpendicular slit, an angled slit, a curved slit, and the combination thereof", and there is no disclosure or suggestion of more than one row of such slits being provided along the longitudinal axis of the catheter. That is, although the present claims 1 and 8 specifically recite that "the apertures are arranged into a plurality of rows generally extending along the longitudinal axis of the lumen" (emphasis added), both of the Ash and de la Rama references fail to teach or suggest such an arrangement of any type of apertures, and the Examiner fails to provide any support to sustain such an argument. For at least this additional reason, independent claims 1 and 8 and their dependent claims are allowable over the cited references.

Finally, with regard to the last of the three reasons set out above for traversal of the pending rejection, one would not be motivated to modify the holes of the Ash reference with the slits of the de la Rama reference, as such a modification would render the catheter of the Ash reference unsatisfactory for its intended purpose. In particular, if one were to modify the holes of the Ash reference with the slits of the de la Rama reference, as suggested by the Examiner, there could be no reasonable expectation that such a catheter would be useful for the intended purpose of perfusion, as in the present claims, because such a modification would limit the efficacy of the hemodialysis catheter depending on whether it is in a flexed or an unflexed condition. In other words, if the catheter of the Ash reference instead included slits having open and closed configurations rather than holes that are open in all positions of the catheter (as is set out in the Ash specification), the catheter slits could undesirably be in a closed position during a dialysis

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procedure, which would greatly limit or even eliminate all fluid flow and prevent proper operation of the hemodialysis catheter.

Accordingly, it is submitted that presently pending claims 1, 3, 7, 8, 10, and 13 are currently in condition for allowance, a notice of which is earnestly solicited. If the Examiner finds any issue remaining after consideration of this response, the Examiner is invited to contact the undersigned, at the Examiner's convenience, in order to expedite any remaining prosecution.

Respectfully Submitted,

Dated: /2/22/18 P

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